

Title (en)
INCREASED DATA STORAGE IN OPTICAL DATA STORAGE AND RETRIEVAL SYSTEMS USING BLUE LASERS AND/OR PLASMON LENSES

Title (de)
VERBESSERTE DATENSPEICHERUNG IN OPTISCHEN DATENSPEICHER- UND ABRUFSYSTEMEN MIT BLAUEN LASERN UND/ODER PLASMON-LINSEN

Title (fr)
STOCKAGE DE DONNEES AUGMENTE DANS UNE MEMOIRE OPTIQUE ET SYSTEMES DE RECUPERATION FAISANT APPEL A DES LASERS BLEUS ET/OU DES LENTILLES A PLASMONS

Publication
EP 1428212 A4 20080109 (EN)

Application
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Priority
• US 0227613 W 20020830
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Abstract (en)
[origin: US2003048744A1] An optical recording medium includes a crystallizing layer for enhancing the crystallization of a phase change memory layer, an energy storage layer for aiding the state transformations of a phase change memory layer, and/or a modifying element for increasing absorption and contrast at short wavelengths. An optical data storage and retrieval system containing same. Also a light-plasmon coupling lens including an optically transparent substrate having a light incident surface and a light-plasmon coupling surface opposite the light incident surface. The light-plasmon coupling surface including at least a set of circular concentric peaks/valleys which form a Fourier sinusoidal pattern in the radial direction of the circular concentric peaks/valleys. A conformal layer of metal is deposited on the light-plasmon coupling surface of the substrate and has aperture at the center of thereof through which plasmons are transmitted.

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G11B 7/24

IPC 8 full level
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Citation (search report)
• [X] US 5278011 A 19940111 - YAMADA NOBORU [JP], et al
• See references of WO 03021589A1

Citation (examination)
US 5912104 A 19990615 - HIROTSUNE AKEMI [JP], et al

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